

ENVIRONMENTAL TOPICAL AREA CONTINUING TRAINING



CERCLA Activities Oversight

INSTRUCTOR GUIDE

Produced by
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Training and Technical Qualifications Group

Additional copies of this guide can be downloaded from the Internet
<http://cted.inel.gov/cted/rfv/video.htm>

GOAL

The goal of this learning activity is for DOE employees to apply their knowledge of environmental compliance. This goal is accomplished through short video vignettes that address common issues and potential problems found throughout DOE facilities. The participants will be introduced to a series of questions that they will use to resolve the issues presented in the vignettes. When the participants learn how to analyze situations and ask the right questions, the issue is mostly resolved.

This is one of three learning activities available to you. This program deals with oversight issues found at DOE CERCLA activities. The other two videos deal with Oversight at DOE Treatment, Storage, and Disposal facilities and Analytical Laboratories.

MATERIALS

The following materials are needed to conduct this learning activity:

- Program 3 video
- A VHS VCR and television monitor
- Video 3 participant guide(s); each participant will need one
- Video 3 instructor guide(s); each instructor will need one
- White board
- White board pens
- Pencils for participants
- Flip Chart Page posted on a wall with these Five Questions:
 - “What is happening?”
 - “What ‘questions’ should I ask?”
 - “What research should I do?”
 - “What ‘rules’ apply?”
 - “What are the overlaps (interrelationships), if any?”

PRE-REQUISITES

This is a program of "continuing training." To get the full benefit of these learning activities it is recommended that participants have a basic knowledge of the information found in the Environmental Technical Qualification Program Self-Study Guide. This guide is available from the DOE Clearinghouse for Training, Education and Development web site at <http://cted.inel.gov/cted/trainmat.html>.

HOW TO CONDUCT THE ACTIVITY

This instructor guide will take you step by step in conducting the learning activity. It is important to read the instructor guide and participant guide and watch the video thoroughly a few times before you conduct the learning activity. Get to know the material well and refer to the instructor guide as needed during the presentation. Do not read verbatim from the instructor guide. The participants will enjoy the session more if you do not hold the guide up and read word for word from it. There is also room in the right-hand column for you to make notes to yourself.

The video has short vignettes that you will play for a few minutes and then stop the tape to discuss with the participants. Be prepared to stop the tape when prompted. Do not let the tape continue to play into the next section until you have completed the discussions as outlined.

An exact time duration for this learning activity is not indicated because the length of time it will take to complete will depend mostly on how much discussion there is about the questions that will be posed. We suggest planning on about 4 hours.

Start the learning activity on time and take breaks as needed. Set up the tables and chairs in the room that will be most conducive for large group discussions. We suggest setting up tables in a U shape with the VCR and monitor in front of the room.

CONDUCT THE ACTIVITY

NOTES

1. Introduce yourself and co-instructors (if applicable) and explain the purpose behind this training. The purpose is to provide the opportunity for DOE employees to apply their knowledge of environmental compliance after having completed the self-study guide.
2. If needed, have the participants introduce themselves to the each other.
3. Discuss housekeeping items as necessary, such as breaks, restrooms, how much time the training will take, etc.
4. Ask the participants to refer to page 3 in their participant guides.
5. Tell the participants to observe the video and ask themselves the five questions listed on page 3 of the participant guide.

These questions are:

- "What is happening?"
- "What 'questions' should I ask?"
- "What research should I do?"
- "What 'rules' apply?"
- "What are the overlaps (interrelationships), if any?"

Tell the participants that they should be looking for broad issues. Which acts or regulations apply in this situation.

6. Play the first portion of the video until the video asks you to press "STOP"

7. After stopping the video tape, ask the participants to write down their answers based on what they just observed, to those five key questions and the sixth question on the paper provided starting on page 3 in the participant guide.
8. Give the participants a minimum of 15 minutes (or however long you feel appropriate) to write their answers.
9. After you have given them an appropriate amount of time to write their answers, ask someone to share what they wrote as an answer to question 1.
10. The possible answers are included at the end of this guide under **FIRST BREAK MATERIAL**.
11. The purpose of this discussion is to get the participants to share their viewpoints of what they saw on the video. Get the participants to learn from each other as peoples answers will probably be different.
12. Remember: Many of these answers may be subject to interpretation and more than one answer may be right. The goal is to get them to think logically and analyze the situation by asking the right questions.
13. Also remember to include a discussion on applicable local and state laws for your location.
14. Continue to have the participants discuss each question as it relates to the scenario until all 5 questions have been discussed.
15. After you have ended the discussion, turn the video back on. The video will continue the scenario.

16. Play the next portion of the video until the video asks you to press "STOP"
17. After stopping the video tape, ask the participants to write down their answers based on what they just observed, to the same five key questions as before and the sixth question on the paper provided starting on page 5 in the participant guide.

But this time they should be looking for specific laws or regulations and how they apply to this scenario.
18. The possible answers are included at the end of this guide under **SECOND BREAK MATERIAL**.
19. Give the participants a minimum of 15 minutes (or however long you feel appropriate) to write their answers.
20. After you have given them an appropriate amount of time to write their answers, ask someone to share what they wrote as an answer to question 1.
21. Once again, the purpose of this discussion is to get the participants to share their viewpoints of what they saw on the video. Get the participants to learn from each other as people will see different things.
22. Continue to have the participants discuss each question as it relates to the scenario until all 5 questions have been discussed.
23. After you have ended the discussion, turn the video back on. The video will continue the scenario.
24. Play the next portion of the video until the video asks you to press "STOP"

25. After stopping the video tape, ask the participants to write down their answers, on page 7 of the participant guide, based on what they just observed about Rob's situation. The participants should write down what they think Rob should do.
26. Give the participants a minimum of 15 minutes (or however long you feel appropriate) to write their answers.
27. The possible answers are included at the end of this guide under **THIRD BREAK MATERIAL**.
28. After you have given them an appropriate amount of time to write their answers, ask someone to share what they wrote as an answer.
29. Once again, the purpose of this discussion is to get the participants to share their viewpoints of what they saw on the video. Get the participants to learn from each other as people will see different things.
30. Continue to have the participants discuss the situation until it has been covered thoroughly.
31. After you have ended the discussion, turn the video back on. The video will conclude with the next segment.
32. After the video is finished playing, stop the tape and ask if there is anyone who would like to comment further.
33. Close by reminding the participants that the important key point is to ask themselves these questions so that they can identify the important issues in the situations they observe.

34. Tell the participants that there are two other programs that they can participate in that follows this same structure. The other programs deal with oversight at a treatment, storage, and disposal facility and the analytical laboratory oversight.

FIRST BREAK ANSWERS

Rob is an experienced Environmental Engineer. His most recent assignment was oversight at the Treatment Storage and Disposal facility on the site. He knew how that facility operated and was fully familiar with the TSD operations, laws and procedures. Much of the waste handled at the TSD came from the CERCLA activities where he is now assigned. Rob's self-confidence and familiarity with TSD functions gave him the belief that the rules were the same. He soon discovers that they are not.

Rob needs to realize that although conditions look similar, the laws are not always the same. A lot is based on judgement, Rob will find that it must be informed judgement - not intuition based on previous experience.

Please note: Conditions and practices at locations across the DOE complex can vary widely. Simply being different does not mean it's wrong. Also, this material is not all-inclusive. You will likely see and discuss issues not mentioned in this guide. Those additional issues are both valid and pertinent to the topic. Such discussion is encouraged.

When asking the "5 Key Questions" Rob should be looking for the following:

1. "What is happening?"

Rob should immediately learn:

- The scope and levels of activity on the site;
- possible sources of emissions and releases, and the potential for these;
- what the people are doing and how they do it; and
- why each person is performing a particular task.

Rob should perform a preliminary survey of the facility's operations. This is to determine obvious "good" and "bad" practices. Although a CERCLA activity may look disorganized, order and organization should be evident. Good order and organization of the activity and the professional manner in which personnel perform their work are good indicators of how well the facility is in compliance

with state and Federal laws. Likewise, disorder and poor organization are indications that people may be unprofessional and not well disciplined in their work practices. These are good indicators that state and Federal laws are not being adhered to.

Rob should be evaluating the approaches to the cleanup. He should be evaluating if the site is working under one Record of Decision (ROD) or if it operating under several RODs (a "piecemeal" approach). He should be evaluating which activities are covered under removal actions, and of the activities covered under removal actions, which are time-critical and which are non-time critical. He should be evaluating any *written* agreements that may waive substantive requirements during time-critical and non-time critical removal actions.

2. "What 'questions' should I ask?"

Rob needs to ask "What permits are required for this site to operate?"

Next, he will want to know who is in charge? . . . what is the organization structure? . . . what is the history of operations and any related problems? . . . and what are the current "hot" issues?

It appears that the facility has not completed the remedial investigation and feasibility study (RI/FS). How does the facility place newly discovered areas of contamination into the administrative record? As an ancillary issue of the evaluation and testing processes, how does the facility handle their investigative derived waste (IDW)?

3. "What research should I do?"

It will be necessary for Rob to obtain copies of the ROD(s) for review of activities to be conducted, identification of CERCLA waste management units and applicable areas of contamination (AOCs) to be employed during CERCLA remediation activities and the assignment of applicable or relevant and appropriate requirements (ARARs) or to be considered.

What risks are associated with this activity? CERCLA requirements vary depending on the risks posed. Response actions must be those most

appropriate to address the risks.

Rob needs to examine the decontamination and decommissioning (D&D) aspects of the program to determine if all the D&D activities are covered under the CERCLA administrative process or are some of them covered outside of this process.

For a CERCLA operation much of the research also involves determining what rules apply.

4. "What 'rules' apply?"

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides authority to respond to releases or threatened releases of hazardous substances to DOE decommissioning activities when jurisdictional thresholds established by CERCLA are met.

Even though CERCLA will apply to most decommissioning activities, the type of CERCLA response action for a given facility and how the response should be implemented must be determined. CERCLA applicability means that decommissioning activities must proceed consistent with a specific statutory and regulatory framework that provides significant authority to DOE as well as significant compliance and oversight responsibilities for EPA, States, and stakeholders. Who are the stakeholders and what are their interests?

- Decommissioning activities must be conducted in a manner consistent with CERCLA response authority.
- DOE, under authorization of Executive Order 12580, determines the most appropriate response to prevent or eliminate risks from releases or threatened releases of hazardous substances to the environment.
- Examination of any ongoing discharges, i.e., water and air, subject to the Clean Water Act (CWA) or Clean Air Act (CAA) that are not part of their CERCLA administrative process should be carefully examined.

Some activities although being conducted on the CERCLA site may be clearly RCRA and subject to the RCRA rules. For example, light bulbs collected on the

CERCLA operation and not properly containerized and stored as required by 40 CFR 261.1 and 262.34 are subject to RCRA rather than the CERCLA administration [see <http://www.tis.eh.doe.gov/others/II/Imes/100054.txt>]

Rob must be careful not to overlook "cultural resources" which can be of many types. Archaeological resources are but one part of the cultural resources concept. The abandoned buildings may be subject to the 1966 Historic Preservation Act. Each state may have its own version of Historic Preservation and even though the abandoned buildings are part of the CERCLA site they may still be of historic significance.

5. "What are the overlaps (interrelationships), if any?"

DOE exercise its CERCLA authority in conjunction with the Environmental Protection Agency (EPA) and DOE stakeholders, e.g., state environmental quality agencies, counties and Indian Tribes.,

DOE and EPA develop an Interagency Policy to facilitate streamlined compliance of decommissioning activities with CERCLA requirements.

What could go wrong?

Rob could assume that his experience and knowledge from performing oversight at the Treatment, Storage and Disposal Facility would be directly transferrable to oversight at the CERCLA site. Initially, Rob made that assumption and arrived at some incorrect conclusions. He risks making inappropriate decisions that can jeopardize operations at the site. When realized, this caused Rob to question his competence and erodes his self-confidence. It also strains relations with the site manager and key decisions are affected.

RESTART THE TAPE

SECOND BREAK ANSWERS

1. "What is happening?"

Rob only looked at the remedial action plan and D&D plan. [NOTE: There is an assumption that the remedial action plan is a summary of the ROD activities.] It is possible that the two documents do not clearly describe the whole picture of the activity(s) being covered.

By all appearances the activity is well run and managed. The immediate handling of the discovery of what appeared to be Indian archeological remains demonstrates thorough training and familiarity with procedures for emergency response. This level of professionalism should have been a positive signal to Rob.

2. "What 'questions' should I ask?"

The key question for Rob at this point is "What rules do apply?" Rob is operating under an old set of rules that have gotten in the way of good oversight.

If I was wrong in this area, was I wrong in other decisions? Which ones?

Was I right to shut down the operations?

3. "What research should I do?"

What does the site ROD say? Rob had checked the Remedial Action Memo and the demolition plan but failed to review the ROD.

Removal actions can occur prior to the ROD but it should be mentioned in the ROD that the removal action did occur.

A waste pile that is not covered under the CERCLA record would be fully subject to RCRA [or in the case of the Toxic Substances Control Act (TSCA)].

Although the CERCLA action is Federal, the state regulator could involk a regulatory noncompliance for a RCRA or TSCA violation when it fell out of the

CERCLA action.

4. “What ‘rules’ apply?”

The guiding document for this CERCLA activity is the site ROD. According to the site manager, all operations are being conducted according to the ROD. Areas that needed clarification had been raised to the EPA and had been resolved. Rob needs to learn the details of the ROD and any clarifying guidance provided by the EPA. [NOTE: Guidance documents are *only guidance*. Guidance documents have no statutory authority. Likewise, verbal guidance provided by “official” personnel from any agency is only worth the paper it is printed on.]

5. “What are the overlaps (interrelationships), if any?”

In this instance, it is knowing what overlaps to look for. Some rules DO NOT conflict or overlap. Rules under RCRA and OSHA that deal with treatment storage and disposal operations do not normally apply to a CERCLA activity. Rob needs to get to the point where he fully understands the regulations dealing with CERCLA remediation and D&D functions and does not confuse them with provisions for TSD operations.

The issue of the waste piles may have been valid if they were not addressed in the ROD. According to the site manager they were - but, Rob wasn't sure. Taking action as serious as shutting down a work site should be done with good reason and after confirming the basis. Note that there did not appear to be an eminent health or safety risk. In this case Rob was wrong.

RESTART THE TAPE

THIRD BREAK ANSWERS

This is a case where Rob got off on the wrong foot. He neglected to do the research necessary to perform oversight effectively. He believed that prior experience was enough.

Rob could have been correct in his interpretation. The waste piles may not be identified in any CERCLA administrative process. He will have to check and make certain that it was not a result of a time critical removal action (no public input but there should be some kind of documentation of the decision(s) made). Rob only looked at the remedial action plan and D&D plan. There is an assumption that the remedial action plan is a summary of the ROD activities. It is possible that the two documents do not clearly describe the whole picture of the activity(s) being covered.

Rob acted before he had a full understanding of the rules and procedures for this operation. He could have taken time to listen and to probe the differences in perspective that appeared to Rob to be signals of Seymour's nonresponsiveness. When Rob and Seymour saw things differently Rob could have asked Seymour to explain the basis for his actions, "Seymour, help me to understand your position." This would have lead to discussions of the ROD and the realization that Rob was applying the wrong standards to activities on this CERCLA project.

It isn't easy to admit you made a mistake. But, it goes a long way in regaining your credibility and respect.

RESTART THE TAPE

PART IV - Gathering your Resources

Creating a reference library for every project is a good idea. Along with the expected volumes of regulations and files of permit information there are other resources that can prove useful:

A list of colleagues in similar positions across the complex

A file of newspaper and magazine clippings

An Internet mail list where these topics are discussed.

A list of Internet web sites where this kind of data is available. The following is a short list of some web sites that environmental engineers might find useful. Add these to your "Hot list."

<http://www.earth1.epa.gov/docs/ERNS/docs/cercfact.html>

Fact sheets on Emergency Response Notification System and CERCLA

http://www.ornl.gov/Env_Rpt/csepcra.html

Emergency Planning and Community Right-to-Know

http://www.ornl.gov/Env_Rpt/cscercla.html

Comprehensive Environmental Response, Compensation, and Liability Act

http://www.ornl.gov/Env_Rpt/csintgrt.html

RCRA/CERCLA Integration

http://www.ornl.gov/Env_Rpt/cstable1.html#RCRA

1993 ORR ASER Compliance Summary Tables

<http://www.inel.gov/environment/tools/ffa-co-6.html>

Negotiation of a CERCLA Federal Facilities Agreement

<http://www.em.doe.gov/dd/fctsht1.html>

Questions and Answers - D&D/CERCLA

<http://www.em.doe.gov/dd/fctsht5.html>

For More Detailed Information

<http://tis.eh.doe.gov/docs/egm/gen/gen.0102.txt>
Comparison of RCRA/CERCLA Cleanup Processes

<http://www.em.doe.gov/dd/cercla.html>
Application of CERCLA Response Authority to Department of Energy
Decommissioning Activities

<http://www.tis.eh.doe.gov/others/ll/lmes/100054.txt>
RCRA Hazardous Waste Within CERCLA Boundaries

http://www.osha-slc.gov/OshDoc/Interp_data/INTERP_19921223B.html
EPA CERCLA Regulations and Site Monitoring Requirements of 1910.120.

<http://www.cedar.univie.ac.at/arch/enveng-1/95oct/msg00071.html>
State vs. CERCLA on Permits

This is not a comprehensive list. Once you begin seeking out these documents the sites where they are found will lead you to even more material.

Happy Surfing.